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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,853	07/17/2000	Thomas C. Naratil	74622-011	8319

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EXAMINER

COLBERT, ELLA

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/617,853

Applicant(s)

NARATIL, THOMAS C.

Examiner

Ella Colbert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/18/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-17 are pending in this communication filed 07/18/05 entered as Response to Election/Restriction, Request for Extension of Time, and IDS.
2. The Change in Power of Attorney and Correspondence Address Change filed 07/28/05 has been entered.

#### **Response to Election/Restriction Arguments with Traverse**

3. Applicants' election with traverse of claims 1-17 in the reply filed on 07/18/05 is acknowledged. The traversal is on the ground(s) that claims 1-15 were filed with the specification on July 17, 2000 and claims 16 and 17, which depend from claims 15 and 1 respectively, were added in the Amendment dated February 4, 2005 and Applicants' respectively submits that since claims 1-15 have previously been examined and searched together, there is no serious burden on the Examiner and restriction is improper.

Applicants' argument has been carefully considered. The Election/Restriction is hereby withdrawn in view of Applicants' convincing argument.

4. The 35 USC 101 Rejection for claim 15 has been overcome by Applicants' amendment to claim 15 filed 02/04/05 entered as Amendment and Request for Continued Examination and is hereby withdrawn.
5. The 35 USC 112 second, paragraph rejection of claim 14 has been overcome by Applicants' amendment to claim 14 filed 02/04/05 entered as Amendment and Request for Continued Examination and is hereby withdrawn.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,905,974) Fraser et al, hereafter Fraser in view of (US 5,987,432) Zusman et al hereafter Zusman.

As a Preliminary matter: The recitation "automated trading of U.S. Treasury, Liquid Agency, and Zero Coupon STRIP financial instruments" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

As per claim 1, Fraser teaches, A computer-implemented system for automated trading of U.S. Treasury, Liquid Agency, and Zero Coupon STRIP financial instruments, comprising: an updatable system database (col.5, lines 2-6) and computer implemented system proprietor operative to determine a national best bid and offer price for each financial instrument in the offering inventory (col. 8, lines 6-20), apply a price improvement process to at least one offsetting trade that improves a price of the offsetting trade for at least one party to the offsetting trade, and update the system database and the offering inventory to reflect transactions executed by the system (col. 7, lines 46-57) .

Fraser failed to teach, an updatable offering inventory database, which receives real time price and quantity information pertaining to each financial instrument from a market data feed, execute trades at the national best bid and offer price, and determine if a trade executed by the system is an offsetting trade, wherein an offsetting trade is at least one of a plurality of trades of a same financial instrument, which plurality of trades are executed within a predefined period of time from each other. Zusman teaches, an updatable offering inventory database which receives real time price and quantity information pertaining to each financial instrument from a market data feed (col. 7, lines 5-12 and col. 9, lines 35-50), execute trades at the national best bid and offer price (col. 14, lines 35-50 and line 66-col. 15, line 10), and determine if a trade executed by the system is an offsetting trade, wherein an offsetting trade is at least one of a plurality of trades of a same financial instrument, which plurality of trades are executed within a predefined period of time from each other (col. 7, lines 9-22 and col. 8, lines 6-20 and

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lines 37-61) . It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an updatable offering inventory database which receives real time price and quantity information pertaining to each financial instrument from a market data feed, execute trades at the national best bid and offer price, and determine if a trade executed by the system is an offsetting trade, wherein an offsetting trade is at least one of a plurality of trades of a same financial instrument, which plurality of trades are executed within a predefined period of time from each other and to modify in Fraser because such a modification would allow Fraser to have a feed that dominates a stream of financial market data messages transferred from a single source to one or more message destinations.

As per claim 2, Fraser teaches, A computer-implemented system for automated trading of U.S. Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, further comprising means for canceling or revising orders (col. 6, lines 51-67, col. 7, lines 1-8, col. 11, lines 26-35, and col. 17, lines 5-31).

As per claim 3, Fraser teaches, A computer-implemented system for automated trading of U.S.Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, wherein the system notifies a user that an order has been executed by the system (col. 3, lines 1-7).

As per claim 4, Fraser failed to specifically teach, A computer-implemented system for automated trading of U.S.Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim I, further comprising means for allowing a user to manually update the offering inventory. However, Fraser did teach, a unique keypad

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that is used to input information (col. 8, lines 31-36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a means for allowing a user to manually update the offering inventory and to modify in Fraser because such a modification would allow Fraser to have an efficient input system for the fast paced trading activity.

As per claim 5, Fraser teaches, A computer-implemented system for automated trading of U.S. Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, further comprising means for automatically updating the offering inventory (col. 12, lines 31-48).

As per claim 6, Fraser teaches, A computer-implemented system for automated trading of U.S. Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, comprising updating the national best bid and offer price or the derived price of a financial instrument in the offering inventory (col. 13, lines 2-66 and col. 14, lines 1-21).

As per claim 7, Fraser failed to teach, A computer-implemented system for automated trading of U.S. Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, wherein the market data feed is provided by at least one Interdealer Broker, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the market data feed provided by at least one Interdealer Broker and to modify in Fraser because such a modification would allow Fraser to have the ability to match trades between dealers only and to market bids

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and offers, also known as offerings, to the dealers without disclosing the name of the potential buyers and sellers until a bid and offer is matched.

As per claim 8, Fraser failed to teach, A computer-implemented system for automated trading of U.S.Treasury, Liquid Agency and Zero-Coupon STRIP financial instruments as recited in claim 7, wherein the market data feed is reformatted to record-based data prior to entry into the system, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the market data feed reformatted to record-based data prior to entry into the system and to modify in Fraser because such a modification would allow Fraser to have financial market data received from many financial exchanges throughout the world and to produce output messages with a standardized message format for delivery to customer destinations throughout the region.

As per claim 9, Fraser teaches, A computer-implemented system for automated trading of U.S.Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, further comprising a filter process for removing incorrect market data from the offering inventory (col. 5, lines 33-36 and col. 7, lines 58-61).

As per claim 10, Fraser teaches, A computer-implemented system for automated trading of U.S.Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, wherein the derived price is calculated by (a) determining the captured spread between a last transaction price and a desired benchmark for a financial instrument (col. 6, lines 44-59); (b) determining the current existing price of the



desired benchmark (col. 9, lines 1-22); and (c) adding the captured spread to the current existing price (col. 4, lines 10-14 and col. 6, lines 57-62).

As per claim 11, Fraser teaches, A computer-implemented system for automated trading of U.S. Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, wherein the system proprietor generates a confirmation of the executed order (col. 3, lines 46-57 and col. 8, lines 6-20).

As per claim 12, Fraser did not specifically teach, A computer-implemented system for automated trading of U.S. Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 1, wherein the system allows the user to manually enter interfirm or dealer to dealer trades for execution. However, Fraser does teach using a "unique keypad" to enter information. This is interpreted as a manual process of entering interfirm or dealer to dealer trades for execution by a user.

As per claim 13, Fraser teaches, A computer-implemented system for automated trading of U.S. Treasury, Liquid Agency, and Zero-Coupon STRIP financial instruments as recited in claim 12, wherein the system automatically updates the offering inventory in accordance with the manual trade (col. 8, lines 31-60).

As per claim 14, Fraser teaches, A computer-implemented system for automated trading of high liquidity financial instruments, comprising: a computerized workstation for executing trades (col. 4, lines 58-62); a system processor for processing information pertaining to at least one investor position (col. 4, line 67-col. 5, lines 1-6), Fraser teaches, an updating offering inventory and real time market data for at least one of U.S. Treasury, Liquid Agency (col. 2, lines 1-41), but fails to teach, Zero-Coupon

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STRIP financial instruments and a computer implemented system proprietor for determining national best bid and offer price, converting the national best bid and offer price to a derived price in the event the national best bid and offer price is not available, and applying a price improvement to at least one of a bid and offer price of at least one offsetting trade (col. 7, lines 46-57 and col. 8, lines 6-20).

Fraser failed to teach, Zero-Coupon STRIP financial instruments. However, Zero-Coupon STRIP financial instruments are well known in the art of securities instruments trading. By definition a Zero-coupon STRIP is strips are zero-coupon bonds created from coupon bonds, essentially, each coupon payment and the principal are traded as separate securities. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an updating offering inventory and real time market data for at least one of Zero-Coupon STRIP financial instruments and to modify in Fraser because such a modification would allow Fraser to have a T-note that can be taken component by component and broken down into zero-coupon bonds with different maturities. This independent claim is rejected for the similar rationale as given above for claim 1.

As per claim 15, Fraser teaches, A computer implemented data processing method for the automatic execution of high liquidity financial instruments, comprising: storing information pertaining to an investor's position and an offering inventory (col. 6, lines 44-59); receiving at least one trade order (col. 9, lines 14-37); and Updating the investor's position to reflect the executed trade (col. 6, lines 44- col. 7, line 8).

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This independent claim is rejected for the similar rationale as given above for claims 1 and 14.

As per claim 16, this dependent claim is rejected for the similar rationale as given above for claim 1.

As per claim 17, this dependent claim is rejected for the similar rationale as given above for claims 2-13.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Trojan et al (US 5,297,032) disclosed securities trading using a workstation.

Lupien et al (US 5,101,353) disclosed providing liquidity to the securities markets.

Lawrence (US 5,915,209) disclosed a bond trading system and the buying and selling traders maintaining their own inventory records.

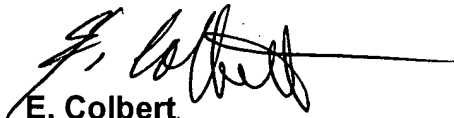
### ***Inquiries***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741. The examiner can normally be reached on Monday-Thursday, 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 571-272-6747. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'E. Colbert', with a long horizontal line extending to the right.

**E. Colbert**  
**Primary Examiner**  
September 19, 2005